

Title (en)

ONLINE DILUTION FOR A LIQUID CHROMATOGRAPHY SYSTEM USING A SAMPLE METERING PUMP

Title (de)

ONLINE-VERDÜNNUNG FÜR EIN FLÜSSIGCHROMATOGRAPHIESYSTEM UNTER VERWENDUNG EINER PROBENDOSIERPUMPE

Title (fr)

DILUTION EN LIGNE POUR UN SYSTÈME DE CHROMATOGRAPHIE EN PHASE LIQUIDE UTILISANT UNE POMPE DE DOSAGE D'ÉCHANTILLON

Publication

EP 3642613 B1 20210331 (EN)

Application

EP 18737759 A 20180613

Priority

- US 201762521826 P 20170619
- US 2018037254 W 20180613

Abstract (en)

[origin: US2018364203A1] An apparatus for diluting a sample in a liquid chromatography system includes a metering pump, a sample needle and a sample valve. One of the sample valve ports is in fluid communication with the first pump port, a second one of the sample valve ports is in fluid communication with the second pump port, and a third one of the sample valve ports is in fluid communication with the sample needle. The sample valve can be configured in a first to conduct a solvent to the first pump port and to fluidically terminate the second pump port, and in a second state in which the sample needle is in fluid communication with the second pump port. A merge valve configurable in different states is in fluid communication with the sample valve. The states of the sample valve and merge valve can be controlled to perform online dilution.

IPC 8 full level

G01N 30/34 (2006.01); **G01N 1/38** (2006.01); **G01N 1/44** (2006.01); **G01N 30/06** (2006.01); **G01N 30/20** (2006.01); **G01N 35/10** (2006.01)

CPC (source: EP US)

G01N 1/38 (2013.01 - EP US); **G01N 30/06** (2013.01 - EP US); **G01N 30/20** (2013.01 - EP US); **G01N 30/34** (2013.01 - EP US); **G01N 35/1097** (2013.01 - EP US); **G01N 2001/383** (2013.01 - EP US); **G01N 2030/027** (2013.01 - US); **G01N 2030/202** (2013.01 - US); **G01N 2030/347** (2013.01 - EP US)

Cited by

US11774415B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 10802001 B2 20201013; **US 2018364203 A1 20181220**; CN 110753842 A 20200204; CN 110753842 B 20221209; EP 3642613 A1 20200429; EP 3642613 B1 20210331; WO 2018236641 A1 20181227

DOCDB simple family (application)

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